

In the Specification

Please amend the specification at page 7, lines 25-30, to read as follows:

D¹
The specific surface area of the catalyst according to the invention can correspond to both the values according to U.S. Patent 4,818,740 and to the values according to European patent publication 409,353. More particularly, the specific surface area is at least 20 m²/g, preferably more than 25 m²/g, since at such values a good activity can be obtained.

In the Claims:

Please amend the indicated claims to read as follows:

Dup
1. (Amended) A catalyst on a support for the selective oxidation of sulfur-containing compounds to elemental sulfur, comprising at least one catalytically active material that is present on a support material, wherein the catalytically active material comprises a mixed oxide having atomically mixed iron ions and zinc ions in an oxidic lattice, which catalyst has a specific surface area of more than 20 m²/g and exhibits substantially no Claus activity under the reaction conditions of said selective oxidation.

Please add the following new claims 15-27:

15. A catalyst according to claim 1, wherein the atomic ratio of iron to zinc is between 25/75 and 97.5/2.5.

16. A catalyst according to claim 1, wherein the atomic ratio of iron to zinc is between 95/5 and 50/50.

Page
17. A catalyst according to claim 1, which catalyst has a specific surface area of more than 25 m²/g, and an average pore radius within a range of about 100 Å to 500 Å.

18. A catalyst according to claim 1, which catalyst has a specific surface area of more than 25 m²/g, and an average pore radius within a range of about 100 Å to 250 Å.

19. A catalyst according to claim 1, 17 or 18, wherein the support is SiO₂.

20. A catalyst according to claim 1, 17 or 18, wherein the catalytically active material is present on the support in an amount of 0.1-50% by weight, calculated on the total mass of the catalyst.

21. A method for the preparation of a catalyst according to claim 1, comprising applying iron and zinc compounds to the surface of a support material, followed by drying and calcination of the support material, during which calcination, an amount of chloride is present on the support material.

22. A method according to claim 21, wherein the applying step comprises impregnating the support material with said iron and zinc compounds in solution, and further comprising, during or after the impregnation, applying an amount of chloride to the surface of the support material.

23. A method according to claim 21 or 22, wherein the amount of chloride is between 0.1 and 20% by weight, based on the amount by weight of the metals.

24. A method according to claim 21 or 22, wherein the chloride is applied as ammonium chloride.

25. A method according to claim 23, wherein the chloride is applied as ammonium chloride.

26. A method for the selective oxidation of sulfur-containing compounds to elemental sulfur, comprising passing a hydrogen sulfide-containing gas together with an oxygen-containing gas at an elevated temperature over the catalyst according to claim 1, 17, or 18.

27. A method according to claim 26, wherein the molar ratio of oxygen to hydrogen sulfide is maintained between 0.5 and 25.